



05-08-03

# 9128/632/\$  
5/16/03  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 00-713-i15)

In the Application of:

Chad A. Mirkin, et al.

Serial No.: 09/975,059

Filed: October 11, 2001

For: NANOPARTICLES HAVING  
OLIGONUCLEOTIDES ATTACHED  
THERETO AND USES THEREFOR

Examiner: Jezia Riley

Group Art Unit: 1637

Confirmation No.: 2661

TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

In regard to the above identified application.

1. We are transmitting herewith the attached:

- a) Seventh Supplemental Information Disclosure Statement;
- b) U.S. PTO 1449 Form with copies of 11 references; and
- c) Return Postcard.

2. With respect to additional fees:

A check in the amount of \$180.00 is attached.

3. GENERAL AUTHORIZATION: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.

4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.10: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service as "Express Mail Post Office to Addressee", addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on this 6 day of May, 2003 under the Express Mail label No. EV 333560791 US.

Date: 5/6/03

Respectfully submitted,

Emily Miao  
Registration No. 35,285



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 00-713-i15)

PATENT

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Alexandria, Virginia 22313-1450

**SEVENTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

In order to comply with discretionary regulations 37 CFR §§1.97 and 1.98, attached hereto is Form PTO-1449, copies<sup>1</sup> of the documents listed thereon. These documents contain information which the Examiner may consider to be important in deciding whether to allow the present application to issue as a patent.

1. Heller, et al., U.S. Patent No. 4,966,143 issued 02/26/91
2. Kausch, et al., U.S. Patent No. 5,508,164 issued 04/16/96
3. Ewart, et al., U.S. Patent No. 5,922,537 issued 07/13/99
4. An, et al., U.S. Patent No. 5,972,615 issued 10/26/99

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180.00 DP

<sup>1</sup>To the extent that a document is listed and no copy of same is attached, then such document is not at the present time available to the undersigned or is available in the file of a parent application. If a listed document is not in the English language and an English translation is readily available, such translation is also attached; if translation is not attached it is not readily available to the undersigned. If a foreign language patent document is cited, and an English language equivalent is known to the undersigned, then such equivalent patent is also cited on the attached form along with the corresponding foreign language patent and a connecting arrow indicated there between; if no such English language equivalent is cited, then none is known to undersigned.

5. Blackburn, et al., U.S. Patent No. 6,264,825 issued 07/24/01
6. Yguerabide, et al., U.S. Patent No. 6,214,560 issued 04/10/01
7. International Patent WO 94/29484 published 12/22/94
8. International Patent WO 00/25136 published 05/04/00
9. Mohanty J., et al., "Pulsed laser excitation of phosphate stabilized silver nanoparticles," *Proc. Indian Acad.*, Vol. 112, No. 1, p. 63-72 (2000)
10. Nicewarner- Peña S., et al., "Hybridization and Enzymatic Extension of Au Nanoparticle-Bound Oligonucleotides," *J. Am. Chem. Soc.*, Vol. 124, p. 7314-7323 (2002)
11. Whitesides G.M., et al., "Soft Lithography in Biology and Biochemistry," *Annu. Rev. Biomed. Eng.*, p. 335-373 (2001)

In accordance with MPEP Sections 609 and 707.05(b), it is requested that each document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is requested even if the Examiner does not consider a cited document to be sufficiently pertinent to use in a rejection, or otherwise does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application.

The present Disclosure Statement is being submitted in compliance with 37 CFR 1.56 insofar as an Examiner might consider any of the cited documents important in deciding whether to allow the application to issue as a patent, but the citation of each document is not to be construed as an admission that such document is necessarily relevant or prior art. No representation is intended that the cited documents represent the results of a complete search, and it is anticipated that the Examiner, in the normal course

of examination, will make an independent search and will determine the best prior art consistent with 37 CFR 1.104(a) and 1.106(b) and, in the course of each search, will review for relevance every document cited on the attached form even if not initialed.

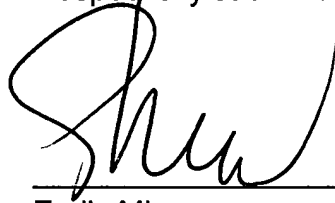
Early and favorable consideration is earnestly solicited.

Respectfully submitted,

Dated: \_\_\_\_\_

5/6/03

McDonnell Boehnen Hulbert & Berghoff  
300 South Wacker Drive, Suite 3200  
Chicago, Illinois 60606  
Telephone : (312) 913-0001  
Facsimile: (312) 913-0002



Emily Miao  
Registration No. 35,285

FORM PTO-1449  
(Rev. 2-32)U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

00-713-i15

Serial No.

09/975,059

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant:

Chad A. Mirkin, et al.

Filing Date:

October 11, 2001

Group:

1637

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## U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	4,996,143	02/26/91	Heller, et al.	435	6	04/13/90
	2.	5,508,164	04/16/96	Kausch, et al.	435	6	10/29/93
	3.	5,922,537	07/13/99	Ewart, et al.	435	6	11/8/96
	4.	5,972,615	10/26/99	An, et al.	435	6	01/21/98
	5.	6,264,825	07/24/01	Blackburn, et al.	205	777.5	06/23/99
	6.	6,214,560	04/10/01	Yguerabide, et al.	435	7.1	04/18/97

## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes	No
	7.	WO 94/29484 /	12/22/94	PCT				
	8.	WO 00/25136 /	05/04/00	PCT				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

	9.	Mohanty J., et al. "Pulsed laser excitation of phosphate stabilized silver nanoparticles," <i>Proc. Indian Acad. Sci.</i> , Vol. 112, No. 1, p. 63-72.
	10.	Nicewarner- Peña S., et al., "Hybridization and Enzymatic Extension of Au Nanoparticle-Bound Oligonucleotides," <i>J. Am. Chem. Soc.</i> , Vol. 124, p. 7314-7323 (2002)
	11.	Whitesides G.M., et al., "Soft Lithography in Biology and Biochemistry," <i>Annu. Rev. Biomed. Eng.</i> , p. 335-373 (2001)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

COPY

Hon. Commissioner of S/N—09/975,059  
Patents and Trademarks

Atty EM

Re: Applicant - Mirkin, et al.

Case No. 00-713-115

**Nanoparticles Having Oligonucleotides Attached Thereto and Uses Therefor**  
Date Mailed: May 6 2003

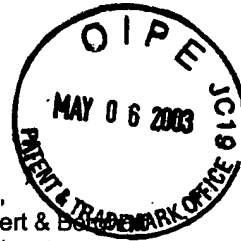
Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- ☒ Transmittal Letter
- ☒ Seventh Supplemental Information Disclosure Statement
- ☒ U.S. PTO 1449 Form with copies of 11 references

**Fee Enclosed**  
\$ 180.00

Respectfully,  
McDonnell Boehnen Hulbert & Berke  
Attorney for Applicant



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